

## CLAIMS

1. Method of manufacturing a sandwich panel made of composite material, comprising the following steps:

- placing, in a mold, an assembly comprising an open cell core, a film of intumescent material covering each of the faces of the core, a dry barrier fabric covering each of the films and an overlay of dry fibers covering each of the barrier fabrics, said barrier fabrics being sealed against a foam capable of being provided during the polymerization of said films and which can be wetted by a resin capable of being injected into the mold ;
- closing the mold ;
- pressurizing and heating the mold according to a cycle for the expansion and polymerization of the intumescent material, in a way that forms said foam, closing off the cells of the core on each of its faces, without impregnating the dry barrier fabrics ;
- evacuating the mold and injecting said resin into it in a manner that impregnates the overlays of dry fibers and the dry barrier fabrics ;
- carrying out a cycle for polymerization of the resin ;
- stripping the panel obtained from the mold.

2. Method according to Claim 1, in which films are used of a thickness such that after polymerization, said foam only fills the parts of the cells of the core which are close to the faces of the core.

3. Method according to Claim 2, in which films are used which have a thickness of about 2.5 mm.

4. Method according to Claim 1, in which barrier fabrics made of calendered polyamide are used.

5. Sandwich panel made of a composite material comprising an open cell core and skins covering both faces of the core, said skins being formed of fibers and resin, a panel in which the cells of the core are closed off by a foam on each of said faces, and in which each of the skins comprises, starting from the core of the panel, a barrier fabric and a fiber overlay, both of which are impregnated with one and the same resin polymerized and stuck onto the core of the panel.

6. Panel according to Claim 5, in which said foam only fills the parts of the cells of the core which are close to the faces of the core.

7. Panel according to Claim 5, in which the barrier fabrics are produced in calendered polyamide.